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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/724,173	12/01/2003	Christian Hamon	58779.000036	9380
21967	7590	08/08/2006	EXAMINER	
HUNTON & WILLIAMS LLP INTELLECTUAL PROPERTY DEPARTMENT 1900 K STREET, N.W. SUITE 1200 WASHINGTON, DC 20006-1109			JOHNSON, EDWARD M	
			ART UNIT	PAPER NUMBER
			1754	
				DATE MAILED: 08/08/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

8

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	10/724,173	HAMON ET AL.	
	<b>Examiner</b>	<b>Art Unit</b>	
	Edward M. Johnson	1754	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) Responsive to communication(s) filed on 12 June 2006.
- 2a) This action is **FINAL**.                            2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) Claim(s) 1 and 3-20 is/are pending in the application.
  - 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) Claim(s) \_\_\_\_\_ is/are allowed.
- 6) Claim(s) 1 and 3-20 is/are rejected.
- 7) Claim(s) \_\_\_\_\_ is/are objected to.
- 8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on \_\_\_\_\_ is/are: a) accepted or b) objected to by the Examiner.
 

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
  - a) All    b) Some \* c) None of:
    1. Certified copies of the priority documents have been received.
    2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
    3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) Notice of References Cited (PTO-892)
- 2) Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_.
- 4) Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) Notice of Informal Patent Application (PTO-152)
- 6) Other: \_\_\_\_\_.

**DETAILED ACTION**

***Claim Rejections - 35 USC § 103***

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

2. Claim 1 is rejected under 35 U.S.C. 103(a) as being unpatentable over Ward '575.

Regarding claim 1, Ward '575 discloses catalyst comprising zeolite and ferrierite (see paragraph bridging columns 5-6), 1-20% iron (column 6, lines 29-31). Ward '575 further discloses potassium (Detailed Description, part F).

Ward fails to disclose 0.5-0.1% as ions in exchange position.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to use 0.5-0.1% as ions in exchange position of the potassium of Ward because Ward '575 discloses it is preferable to replace most or all of the zeolitic sodium and/or potassium with other cations (see column 6, lines 12-18), which would motivate the ordinary artisan to

replace potassium to values approaching zero at least including 0.5-0.1%.

3. Claims 1 and 3-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Farnos '147.

Regarding claims 1, 3, and 5-6, Farnos '147 discloses a catalyst for reduction of NO<sub>x</sub>, including nitrous oxide (abstract and column 1, lines 33-35) comprising ferrierite, zeolite (see column 6, lines 58-63), and about 2% iron (see column 9, lines 25 and 36-39). Farnos further discloses potassium (column 10, lines 6-9), which would have been obvious to optimize the amount thereof to 0.1-0.5%, through routine experimentation.

Farnos '147 fails to disclose agglomeration of an agglomerate.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to agglomerate an agglomeration with the binder of Farnos because Farnos discloses the binder to prepare a formable, extrudable mass so as to control the moisture content, which would motivate the ordinary artisan to agglomerate an agglomeration to produce formability, extrudability, and moisture, as disclosed.

Regarding claims 4-7, 13-14, and 18, Farnos '147 discloses silica and alumina binder (see column 5, lines 33-39).

Regarding claims 8-9, Farnos '147 discloses ferrous and ferric oxide (see column 9, lines 57-59).

Regarding claims 10-11, Farnos '147 discloses ammonium ion exchange (see column 9, lines 5-12).

Regarding claims 12 and 16-17, Farnos '147 discloses about 2% iron (see column 9, lines 25 and 36-39).

Regarding claims 15 and 19, Farnos '147 discloses calcining at 260-925 or 600 degrees Celsius (see Examples and column 10, lines 10-19).

Regarding claim 20, Farnos '147 discloses kaolinite clays (see column 5, lines 14-20).

***Response to Arguments***

4. Applicant's arguments filed 6/12/06 have been fully considered but they are not persuasive.

The rejections under 35 USC §102 have been withdrawn in view of Applicant's amendment.

It is argued that as discussed *supra*, the '147 patent fails... potassium by weight in ion exchange position. This is not persuasive because Farnos further discloses potassium (column 10, lines 6-9), which would have been obvious to optimize the amount thereof to 0.1-0.5%, through routine experimentation.

Art Unit: 1754

It is argued that furthermore, it is noted that previously presented... rendered obvious thereby. This is not persuasive for the reasons above.

It is argued that the '575 patent does not disclose a catalyst for... list of specific zeolites. This is not persuasive because Applicant appears to admit that ferrierite and zeolite are disclosed, arguing that they would not be obvious in view of a broad disclosure. However, it is noted that Applicant claims a catalyst using open language "comprising", which broadly includes many of the various combinations disclosed in Ward '575. Thus, Applicant's objection to the broadness of the prior art disclosure appears conversely applicable to the claim.

It is argued that with regard to the metal used... Col. 6, 11. 34-35. This is not persuasive because Ward '575 discloses 1-20% iron (column 6, lines 29-31).

It is argued that with regard to the amount of potassium... at least including 0.5-0.1%. This is not persuasive because Applicant's argument appears contradictory, since Applicant appears to admit that replacing "most or all" is disclosed, while arguing that only "zero" would be suggested. However, if only "most" is replaced, as disclosed, then more than zero must be leftover. The "result" of such an optimization would be motivated because the potassium replacement is disclosed "for

catalytic purposes" (Detailed Description, part F), which would obviously, to one of ordinary skill, be affect the resultant catalytic properties, as disclosed.

It is argued that furthermore, the generic listing of possible zeolites... Y and mordenite. This is not persuasive because Applicant appears to admit that ferrierite is disclosed. The fact that applicant has recognized another advantage which would flow naturally from following the suggestion of the prior art cannot be the basis for patentability when the differences would otherwise be obvious. See *Ex parte Obiaya*, 227 USPQ 58, 60 (Bd. Pat. App. & Inter. 1985).

**Conclusion**

5. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will

Art Unit: 1754

expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Edward M. Johnson whose telephone number is 571-272-1352. The examiner can normally be reached on M-F 9:30-6:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Stanley S. Silverman can be reached on 571-272-1358. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic

Application/Control Number: 10/724,173  
Art Unit: 1754

Page 8

Business Center (EBC) at 866-217-9197 (toll-free).



Edward M. Johnson  
Primary Examiner  
Art Unit 1754

EMJ